Schizachyrium scoparium (Michx.) Nash var. scoparium

little bluestem Poaceae (Grass Family)

Status: State Threatened

Rank: G5T5S1S2

General Description: Adapted from Hitchcock et al. (1969): The culms of this tufted perennial grass are erect, 28 to 59 in. (70 to 150 cm) tall, often grooved above the nodes, and hairless. The liquies are up to ¼ in. (0.5 to 2.7 mm) long, jagged edged and hairy margined. The blades are flat or folded, 1/16 to 1/4 in. (1.5 to 6 mm) broad, and hairless to rough hairy above. The margins of the blades have short, stiff hairs. The inflorescence is paniculate, with racemes of spikelets borne at the ends of each panicle branch. The spikelets are born in twos at the nodes: one sessile and one pedicellate. The pedicellate spikelet is 1/8 to 1/4 in. (4 to 5 mm) long. The sessile spikelet is 1/8 (4 to 7.5 mm) long. The glumes of the sessile spikelet are usually nearly equal, covered with rough, stiff trichomes on the lower half, or mostly hairless. The first glume is 5 to 7 nerved with the margins folded inward, clasping the second glume. The second glume is keeled and 3-nerved. Each spikelet is 2-flowered, with one fertile floret and one empty floret. The fertile lemma is 1/8 to 1/4 in. (4.2 to 6.5 mm) long, bearing an awn that is abruptly bent at the joint, 1/4 to 1/2 in. (6 to 16 mm) long and usually twisted below.

Identification Tips: There is only one species of *Schizachyrium* in the Pacific Northwest. It blooms quite late compared to most perennial grasses, but can be distinguished at the vegetative stage by its strongly reddish cast.

Phenology: This taxon is generally identifiable from July through September.

Range: Schizachyrium scoparium can be found from Alberta to Quebec and in the United States from southeastern Idaho, Utah, and Arizona, and east throughout the remaining states. It is also known from Mexico. In Washington, this taxon has been seen along the Columbia River in Douglas and Stevens counties.

Habitat: This taxon prefers dry places, canyons and rocky slopes. In Washington, *S. scoparium* var. *scoparium* has been found growing on gravel bars above and below the high water line of the Columbia River, and in old river ox-bows, at an elevation of 610 to 1320 ft. Associated species in Washington include Fendler threeawn (*Aristida longiseta*), spike dropseed (*Sporobolus cryptandus*), western wheatgrass (*Agropyron smithii*), bluegrass (*Poa* spp.), goldenrod (*Solidago* sp.), white

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Known distribution of *Schizachyrium scoparium* var. *scoparium* in Washington

Current (1980+)

Historic (older than 1980)



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sagebrush (*Artemisia ludoviciana*), rose (*Rosa* spp.), Saskatoon serviceberry (*Amelanchier alnifolia*), Rocky Mountain juniper (*Juniperus scopulorum*), needle and thread (*Stipa comata*), western panicgrass (*Panicum occidentale*), Columbia River gumweed (*Grindelia columbiana*), false goldenaster (*Chrysopsis villosa*), Gray's biscuitroot (*Lomatium grayii*), buckwheat (*Eriogonum* sp.), and hawthorn (*Crataegus* sp.).

Ecology: Little bluestem is a major component of the Midwestern tall-grass prairie. In Washington, portions of the populations are located in high quality riparian plant communities dominated by native bunch-grasses and Rocky Mountain juniper.

State Status Comments: There are only a few known populations in the state and they are limited to a specific geographic area.

Inventory Needs: Sand, cobble, and gravelly areas along the Columbia River, especially in Douglas and Stevens counties, should be systematically surveyed for additional populations. Known occurrences should be revisited.

Threats and Management Concerns: Largest threats include habitat conversion to orchards, weed invasion, and hydrologic changes as a result of management of the river for hydroelectric generation.

Comments: Schizachyrium scoparium is listed in Hitchcock et al. (1969) as *Andropogon scoparius*.

References:

Hitchcock, C.L., A. Cronquist, M. Ownbey, J.W. Thompson. 1969. Vascular Plants of the Pacific Northwest Part 1: Vascular Cryptogams, Gymnosperms, and Monocotyledons. University of Washington Press, Seattle, WA. 914 pp.

Cronquist, A., A.H. Holmgren, N.H. Holmgren, J.L. Reveal, P.K. Holmgren. 1977. *Intermountain Flora: Vascular Plants of the Intermountain West, U.S.A Volume 6: The Monocotyledons*. Columbia University Press, New York, New York. 584 pp.

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